



US006604084B1

(12) **United States Patent**  
**Powers et al.**

(10) **Patent No.:** **US 6,604,084 B1**  
(45) **Date of Patent:** **Aug. 5, 2003**

(54) **SYSTEM AND METHOD FOR GENERATING AN EVALUATION IN A PERFORMANCE EVALUATION SYSTEM**

(75) Inventors: **Michael C. Powers**, Irving, TX (US);  
**Douglas A. Sudberry**, Grapevine, TX (US);  
**James A. Eiler**, Irving, TX (US);  
**Robert S. Bennett**, Franklin, TN (US);  
**Clifford R. Phillips**, Bedford, TX (US)

(73) Assignee: **e-talk Corporation**, Irving, TX (US)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/110,108**

(22) Filed: **Jul. 1, 1998**

**Related U.S. Application Data**

(60) Provisional application No. 60/084,794, filed on May 8, 1998.

(51) **Int. Cl.**<sup>7</sup> ..... **G06F 17/60**

(52) **U.S. Cl.** ..... **705/11**

(58) **Field of Search** ..... 705/11, 7; 434/322, 434/107

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,476,535	A	10/1984	Loshing et al. ....	364/480
5,212,635	A *	5/1993	Ferriter .....	364/402
5,218,535	A *	6/1993	Pietrowski .....	434/323
5,241,621	A	8/1993	Smart .....	395/51
5,321,621	A	6/1994	Sainen .....	364/470
5,452,218	A *	9/1995	Tucker et al. ....	364/468
5,500,795	A	3/1996	Powers et al. ....	364/401
5,523,960	A *	6/1996	Jeong .....	364/578
5,551,880	A *	9/1996	Bonnstetter et al. ....	434/236
5,577,919	A *	11/1996	Collins et al. ....	434/322
5,684,964	A	11/1997	Powers et al. ....	395/211
5,726,914	A *	3/1998	Janovski et al. ....	364/552
5,765,138	A *	6/1998	Aycock et al. ....	705/7
5,775,918	A *	7/1998	Yanagida et al. ....	434/353

5,779,486	A *	7/1998	Ho et al. ....	434/353
5,784,452	A	7/1998	Carney	
5,788,504	A *	8/1998	Rice et al. ....	434/219
5,820,386	A *	10/1998	Sheppard, II .....	434/322
5,879,165	A *	3/1999	Brunkow et al. ....	434/322
5,909,669	A *	6/1999	Havens .....	705/11
5,924,073	A *	7/1999	Tyuluman et al. ....	705/2
6,070,143	A *	5/2000	Barney et al. ....	705/8

**FOREIGN PATENT DOCUMENTS**

EP	0 587 290	A2	7/1993
EP	0 644 510	A2	9/1994
GB	2221068	A	1/1990
WO	WO 97/31320		8/1997

**OTHER PUBLICATIONS**

Falcione, Raymond L. "Appraisals That Say What You Really Mean." HR Magazine. vol. 39, No. 9, p. 154, Sep. 1994.\*

McCune, Jenny C. "Employee Appraisals, the Electronic Way." Management Review. vol. 86, No.9, pp. 44-46, Oct. 1997.\*

Patz, J.T., 'Employee Appraiser 3.0-Best Manager Edition—Employee Reviewer Deserves a Raise', Aug. 23, 1996, issue 709, p. 116 (3), Windows Magazine. Rtdv from: Dr-Link, Access # WIN709:082396:93.\*

Stevens, L., 'Make staff evaluationS more manageable', May 26, 1997, v16, n13, IAC Consolidated Business Collection [online], Government Computer News. Rtdv from: Dr-Link, Access # 19527913.\*

(List continued on next page.)

*Primary Examiner*—Tariq R. Hafiz

*Assistant Examiner*—Susanna Meinecke-Díaz

(74) *Attorney, Agent, or Firm*—Baker Botts L.L.P.

(57) **ABSTRACT**

An evaluation is generated in a performance evaluation system by defining a plurality of questions. A plurality of performance areas are defined and each associated with at least one of the questions. In response to a request for an evaluation including a performance area, questions associated with the performance area are included in the evaluation.

**26 Claims, 9 Drawing Sheets**

PERFORMANCE AREA TABLES

GUIDELINE TABLE		PERFORMANCE AREAS TABLE	
GUIDELINE ID	PERFORMANCE AREA ID	PERFORMANCE AREA 1	
SERVICE GROUP		PERFORMANCE AREA 2	
TECHNICAL GROUP		PERFORMANCE AREA 3	
PRODUCT A TEAM		PERFORMANCE AREA 4	
PRODUCT B TEAM		PERFORMANCE AREA 5	
		PERFORMANCE AREA 6	

PERFORMANCE AREA ASSIGNMENT TABLE	
GUIDELINE ID	PERFORMANCE AREA ID
SERVICE GROUP	PERFORMANCE AREA 1
SERVICE GROUP	PERFORMANCE AREA 2
TECHNICAL GROUP	PERFORMANCE AREA 1
TECHNICAL GROUP	PERFORMANCE AREA 3
PRODUCT A TEAM	PERFORMANCE AREA 1
PRODUCT A TEAM	PERFORMANCE AREA 4
PRODUCT A TEAM	PERFORMANCE AREA 5
PRODUCT B TEAM	PERFORMANCE AREA 1
PRODUCT B TEAM	PERFORMANCE AREA 4
PRODUCT B TEAM	PERFORMANCE AREA 6

QUESTION TABLE			
QUESTION ID	TITLE	TEXT	WEIGHT
QUESTION 1	SCHEDULE ADHERENCE	HOW OFTEN DOES THE AGENT WORK TO ORIGINALLY ASSIGNED SHIFT?	3
QUESTION 2	PROMPTNESS	HOW OFTEN IS THE AGENT LATE FOR WORK?	4
...	...	...	...
QUESTION 10	ATTENDANCE	HOW OFTEN DOES THE AGENT MISS WORK?	5

OTHER PUBLICATIONS

McCune, J., 'Employee appraisals, the electronic way.', Oct. 1, 1997, v86, n9, IAC Consolidated Business Collection [online], Management Review. Rtdvd from: Dr-Link, Access # 20057413.\*

Shair, D., 'CompStar adds efficiency and flexibility to performance . . .', Oct. 1, 1997, v42, p37(5), Business Process & Business Administration—MNIS [online], HR Magazine. Dr-Link, Accession # 9711051721.\*

Kramer, M., 'Designing and individual performance evaluation system', Mar. 1, 1998, v67, n3, IAC Consolidated Business Collection, The FBI Law Enforcement Bulletin. Dr-Link, Access # 20576395.\*

Search Report re: PCT/US 99/ 10143, Sep. 16, 1999.

Microsoft Access User's Guide v. 2.0 (Table of Contents only), 1994, pp. i-x.\*

Performance Appraisal Management SYstem (PAMS). Product Description [online]. The Waters Consulting Group, 1998-2000 [retrieved on Dec. 11, 2000]. Retrieved from the

Internet: <URL: [www. watersconsulting.com/servprod/pams.htm](http://www.watersconsulting.com/servprod/pams.htm)>.\*

Viehweg, Laurie. "Maximize Your Employee Appraisal System," Feature Article [online]. Jun. 1997. [retrieved on Dec. 7, 2000]. Retrieved from the Internet: <URL: [www. bcsolutionsmag.com/Archives/June1997/default.htm](http://www.bcsolutionsmag.com/Archives/June1997/default.htm)>.\*

Prof. Dr. A.W. Scheer and A. Hars, "From CIM to Enterprise-Wide Data Modeling," ICCIM '91 Proceedings of the International Conference on Computer Integrated Manufacturing, Singapore, pp. 89-92, Oct. 2-4, 1991.

R.L. Katz, "Business/enterprise modeling," IBM Systems Journal, Armonk, New York, vol. 29, No. 4, pp. 509-525, 1990.

Teknekron Infoswitch Corporation, "P&Q Review!™ Productivity and Quality Performance Evaluation, Getting Started Guide," Version 2 #151-0801-002, Jun. 1995.

\* cited by examiner

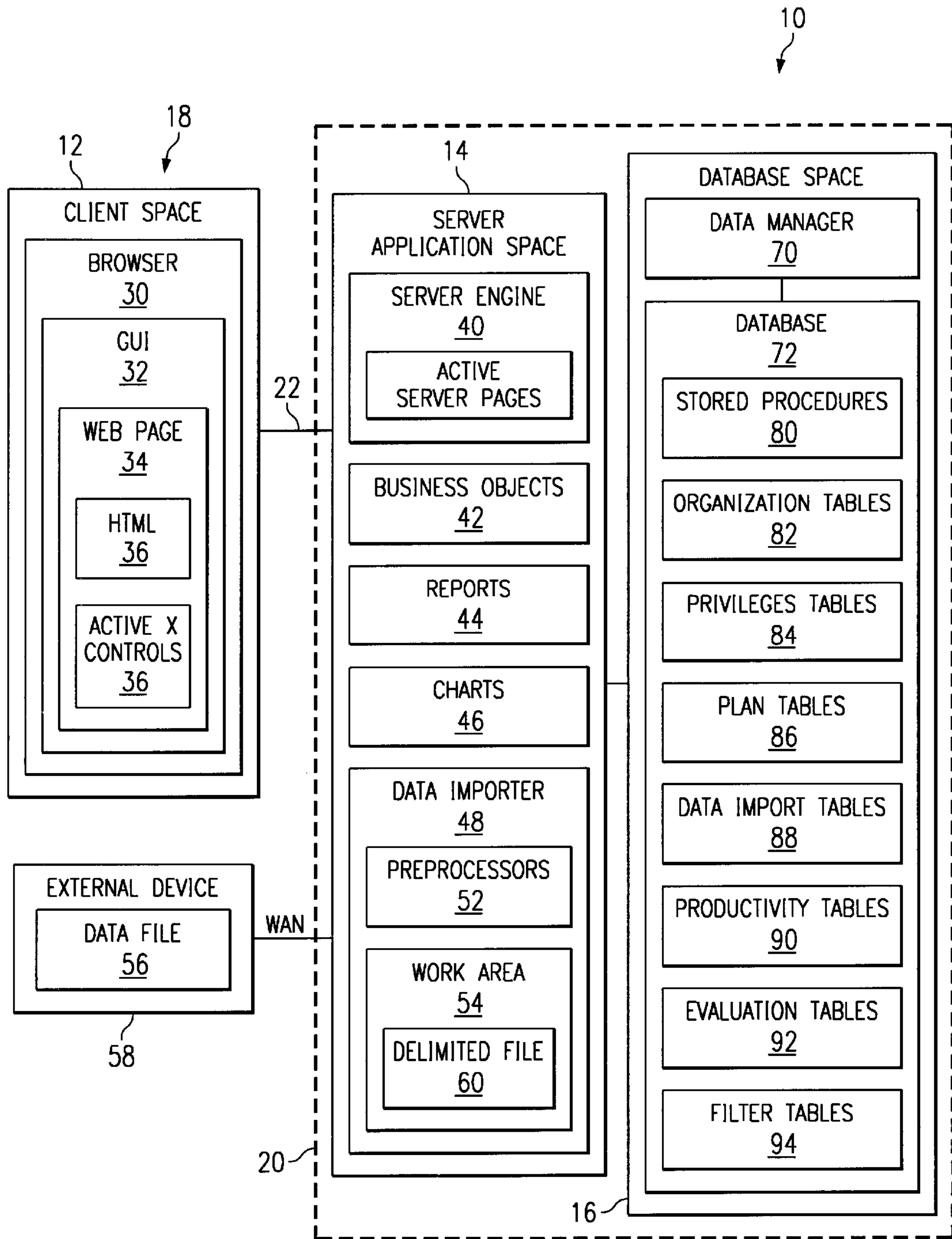


FIG. 1

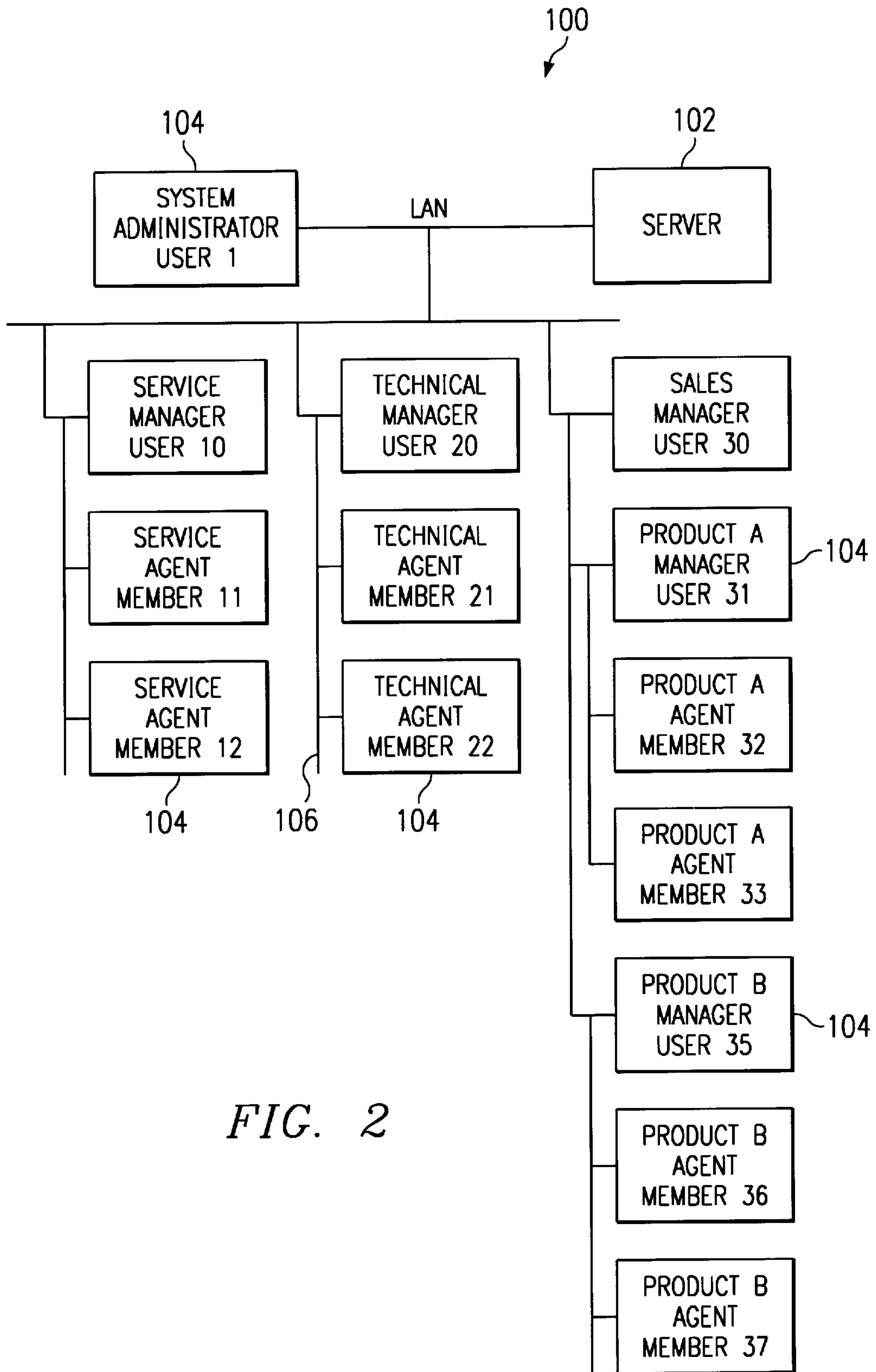


FIG. 2

ORGANIZATION TABLES

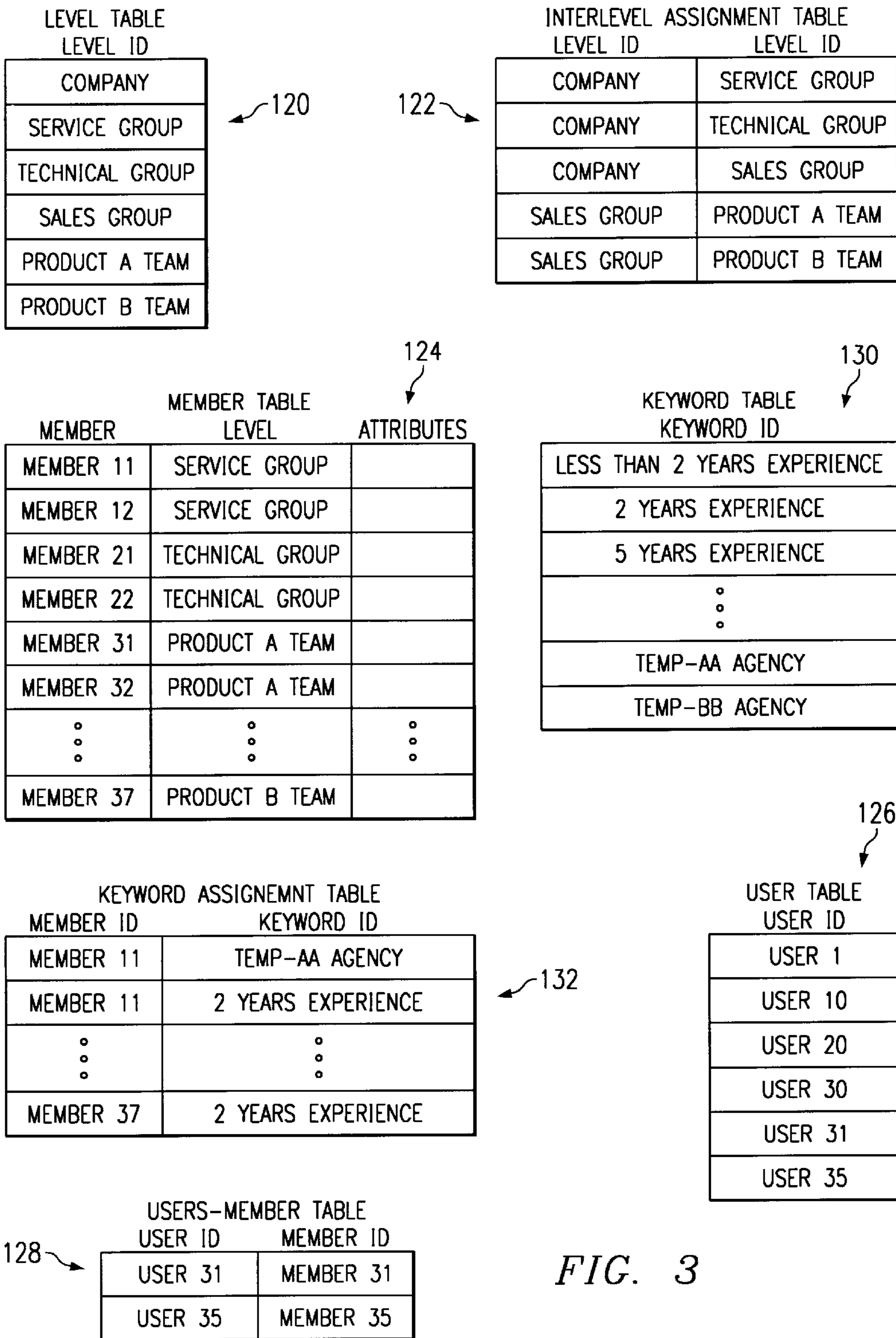


FIG. 3

PRIVILEGES TABLES

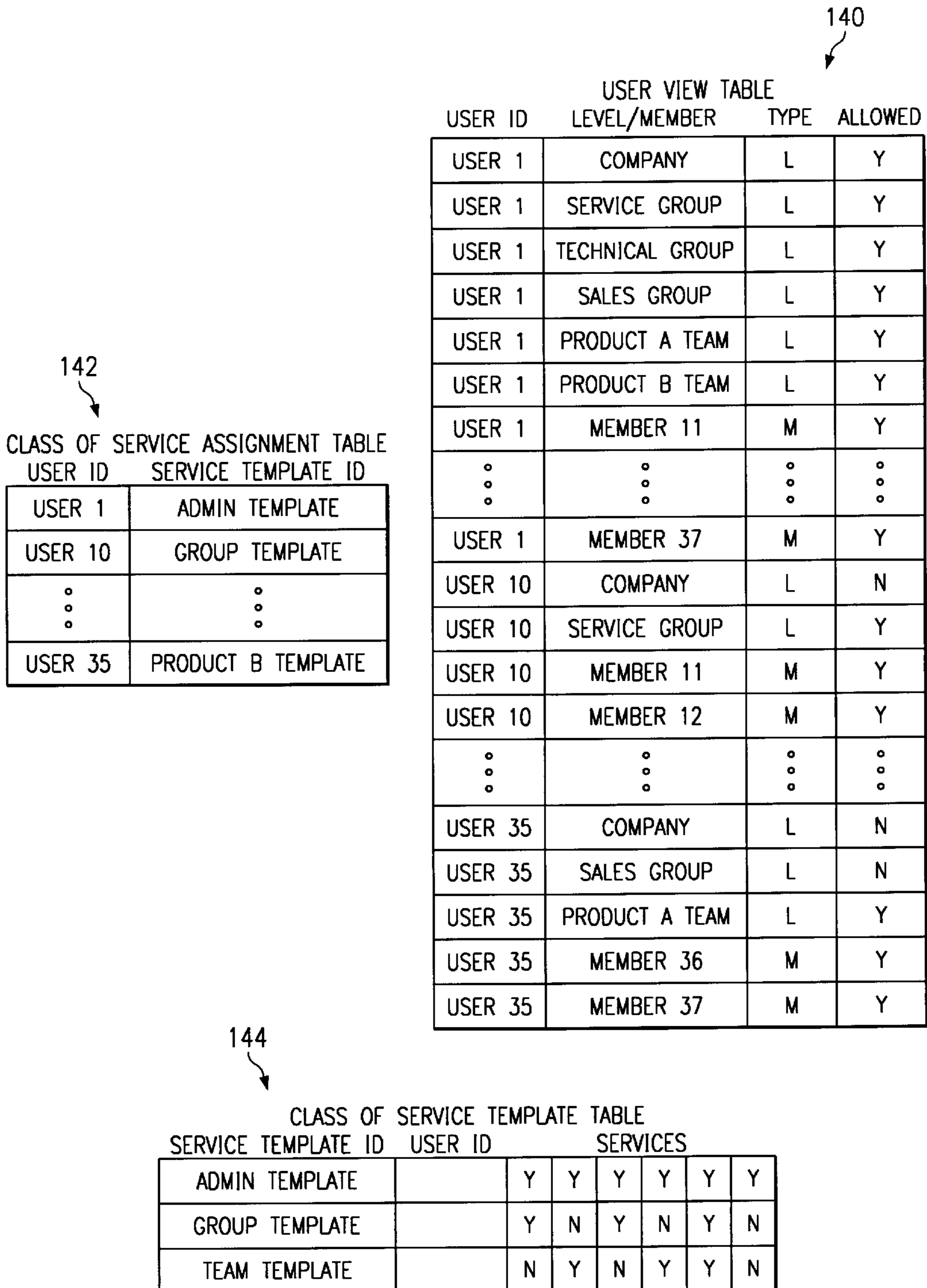


FIG. 4

PERFORMANCE AREA TABLES

GUIDELINE TABLE GUIDELINE ID		PERFORMANCE AREAS TABLE PERFORMANCE AREA ID	
162 →	SERVICE GROUP	← 154	PERFORMANCE AREA 1
	TECHNICAL GROUP		PERFORMANCE AREA 2
	PRODUCT A TEAM		PERFORMANCE AREA 3
	PRODUCT B TEAM		PERFORMANCE AREA 4
	PERFORMANCE AREA 5		
	PERFORMANCE AREA 6		

PERFORMANCE AREA ASSIGNMENT TABLE GUIDELINE ID PERFORMANCE AREA ID	
164 →	SERVICE GROUP PERFORMANCE AREA 1
	SERVICE GROUP PERFORMANCE AREA 2
	TECHNICAL GROUP PERFORMANCE AREA 1
	TECHNICAL GROUP PERFORMANCE AREA 3
	PRODUCT A TEAM PERFORMANCE AREA 1
	PRODUCT A TEAM PERFORMANCE AREA 4
	PRODUCT A TEAM PERFORMANCE AREA 5
	PRODUCT B TEAM PERFORMANCE AREA 1
	PRODUCT B TEAM PERFORMANCE AREA 4
	PRODUCT B TEAM PERFORMANCE AREA 6

QUESTION TABLE			
QUESTION ID	TITLE	TEXT	WEIGHT
QUESTION 1	SCHEDULE ADHERENCE	HOW OFTEN DOES THE AGENT WORK TO ORIGINALLY ASSIGNED SHIFT?	3
QUESTION 2	PROMPTNESS	HOW OFTEN IS THE AGENT LATE FOR WORK?	4
⋮	⋮	⋮	⋮
QUESTION 10	ATTENDANCE	HOW OFTEN DOES THE AGENT MISS WORK?	5

FIG. 5A

PERFORMANCE AREA TABLES

QUESTION ASSIGNMENT TABLE

156

PERFORMANCE AREA ID	QUESTION ID
PERFORMANCE AREA 1	QUESTION 1
PERFORMANCE AREA 1	QUESTION 2
PERFORMANCE AREA 2	QUESTION 3
PERFORMANCE AREA 2	QUESTION 4
PERFORMANCE AREA 3	QUESTION 3
PERFORMANCE AREA 3	QUESTION 5
PERFORMANCE AREA 4	QUESTION 3
PERFORMANCE AREA 4	QUESTION 6
PERFORMANCE AREA 5	QUESTION 7
PERFORMANCE AREA 5	QUESTION 8
PERFORMANCE AREA 6	QUESTION 9
PERFORMANCE AREA 6	QUESTION 10

ANSWER TYPES TABLE

152

QUESTION ID	ANSWER ID	ATTRIBUTES
QUESTION 1	ANSWER 1	
QUESTION 1	ANSWER 2	
⋮	⋮	⋮
QUESTION 10	ANSWER 1	

160

EXPRESSION ASSIGNMENT TABLE

PERFORMANCE AREA ID	EXPRESSION ID
PERFORMANCE AREA 1	EXPRESSION 1
PERFORMANCE AREA 2	EXPRESSION 2
⋮	⋮
PERFORMANCE AREA 6	EXPRESSION 1

158

EXPRESSION TABLE

EXPRESSION ID	EXPRESSION
EXPRESSION 1	
EXPRESSION 2	
⋮	⋮
EXPRESSION 6	

FIG. 5B



PRODUCTIVITY TABLE				DATA ELEMENT TABLE
MEMBER ID	DATE	DATA ELEMENT ID	VALUE	DATA ELEMENT ID
MEMBER 11	5/11/98	DATA ELEMENT 1		DATA ELEMENT 1
MEMBER 12	5/11/98	DATA ELEMENT 1		DATA ELEMENT 2
MEMBER 21	5/11/98	DATA ELEMENT 2		⋮
⋮	⋮	⋮	⋮	⋮
MEMBER 37	5/11/98	DATA ELEMENT 10		DATA ELEMENT 10

FIG. 6

IMPORT TEMPLATE TABLE			CONFIGURATION TABLE				
IMPORT TEMPLATE ID	PREPROCESSOR	DELIMITER	COLUMN NO	NAME	TYPE	FORMAT	DATA ELEMENT ID
IMPORT TEMPLATE 1			1				
IMPORT TEMPLATE 2			2				
⋮	⋮	⋮	3				
IMPORT TEMPLATE 5			4				
			5				

IMPORT TEMPLATE ASSIGNMENT TABLE	
CONFIGURATION ID	IMPORT TEMPLATE ID
CONFIGURATION 1	IMPORT TEMPLATE 1
⋮	⋮
CONFIGURATION 10	IMPORT TEMPLATE 10

FIG. 7

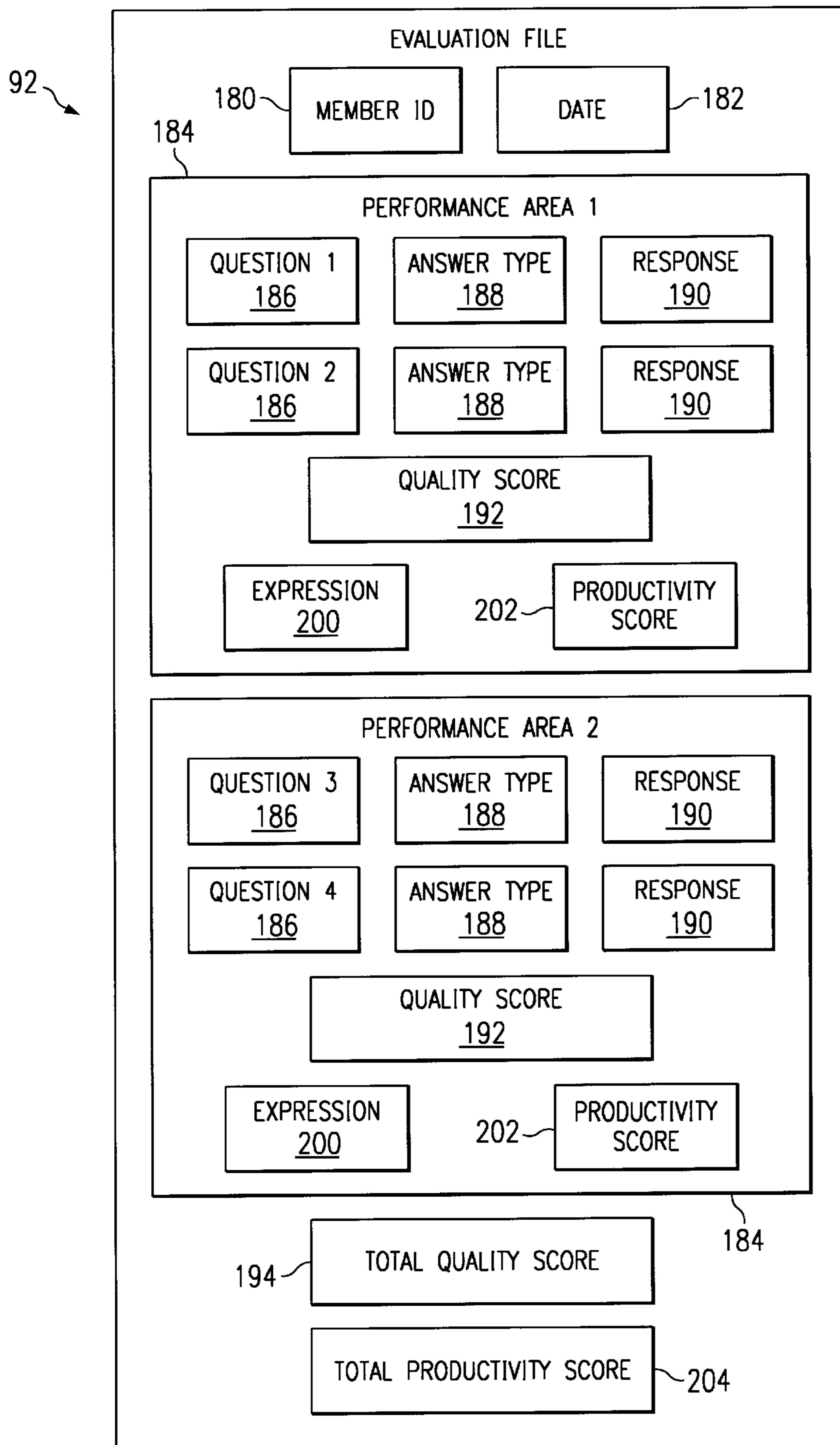


FIG. 8

FILTER TABLE

210 ↘

FILTER ID	PLANS		DATES		DATA		AVERAGES		KEYWORDS		SAMPLE SIZE	
	SELECTED	VALUES	SELECTED	VALUES	SELECTED	VALUES	SELECTED	VALUES	SELECTED	VALUES	SELECTED	VALUES
FILTER 1												
FILTER 2												
○	○		○		○		○		○		○	
○	○		○		○		○		○		○	
○	○		○		○		○		○		○	
FILTER 10												

FIG. 9

## SYSTEM AND METHOD FOR GENERATING AN EVALUATION IN A PERFORMANCE EVALUATION SYSTEM

### RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application Ser. No. 60/084,794, entitled "METHOD AND SYSTEM FOR DETERMINING THE PERFORMANCE OF A CALL CENTER AGENT," filed May 8, 1998, which is hereby incorporated by reference.

This application is related to copending U.S. patent application Ser. No. 09/110,106, entitled "SYSTEM AND METHOD FOR DEFINING THE ORGANIZATIONAL STRUCTURE OF AN ENTERPRISE IN A PERFORMANCE EVALUATION SYSTEM"; copending U.S. patent application Ser. No. 09/110,109, entitled "SYSTEM AND METHOD FOR PROVIDING ACCESS PRIVILEGES FOR USERS IN A PERFORMANCE EVALUATION SYSTEM"; copending U.S. patent application Ser. No. 09/110,103, entitled "SYSTEM AND METHOD FOR IMPORTING PERFORMANCE DATA INTO A PERFORMANCE EVALUATION SYSTEM"; and copending U.S. patent application Ser. No. 09/110,07, entitled "SYSTEM AND METHOD FOR GENERATING RESULTS IN A PERFORMANCE EVALUATION SYSTEM".

### TECHNICAL FIELD OF THE INVENTION

This invention relates generally to evaluation tools, and more particularly to a system and method for generating an evaluation in a performance evaluation system.

### BACKGROUND OF THE INVENTION

Evaluation tools are used to gather and record productivity and quality statistics for a business or other organization. Analysis of such information allows inefficiencies and other problems of the business to be identified and corrected. In this way, business performance is maximized.

Traditionally, evaluation tools are implemented on stand-alone systems that are unable to effectively communicate with other resources in a network environment. Other problems include the use of predefined organizational structures that cannot be modified to match the organizational structure of a business. In addition, privileges, evaluations, and reports are generally hard-coded for each evaluation tool. Such customization leads to high implementation and administration cost.

### SUMMARY OF THE INVENTION

In accordance with the present invention, a performance evaluation system is provided that substantially eliminates or reduces disadvantages or problems associated with the previously developed systems. In particular, the present invention provides a performance evaluation system that uses performance areas to generate performance evaluations.

In one embodiment of the present invention, an evaluation is generated in a performance evaluation system by defining a plurality of questions and a plurality of performance areas. The performance areas are each associated with at least one of the questions. In response to a request for an evaluation including a performance area, questions associated with the performance area are included in the evaluation.

More specifically, in accordance with one embodiment of the present invention, a plurality of guidelines may be defined and each associated with at least one of the perfor-

mance areas. In this embodiment, in response to a request for an evaluation including a guideline, questions associated with each of the performance areas associated with the guideline are included in the evaluation.

Technical advantages of the present invention include providing an improved performance evaluation system. In particular, evaluations can be automatically generated for disparate groups by selecting different performance areas. In addition, members in a group are evaluated against the same set of criteria to provide fairness and objectivity. As a result, managers can perform consistent, objective evaluations efficiently.

Other technical advantages will be readily apparent to one skilled in the art from the following figures, description, and claims.

### BRIEF DESCRIPTION OF THE DRAWINGS

For a more complete understanding of the present invention and its advantages, reference is now made to the following description taken in conjunction with the accompanying drawings in which:

FIG. 1 is a block diagram illustrating a performance evaluation system in accordance with one embodiment of the present invention;

FIG. 2 is a block diagram illustrating an example call center using the performance evaluation system of FIG. 1;

FIG. 3 illustrates details of the organization tables of FIG. 1 in accordance with one embodiment of the present invention;

FIG. 4 illustrates details of the privilege tables of FIG. 1 in accordance with one embodiment of the present invention;

FIG. 5 illustrates details of the plan tables of FIG. 1 in accordance with one embodiment of the present invention;

FIG. 6 illustrates details of the productivity tables of FIG. 1 in accordance with one embodiment of the present invention;

FIG. 7 illustrates details of the data import tables of FIG. 1 in accordance with one embodiment of the present invention;

FIG. 8 illustrates details of an evaluation file stored in the evaluation tables of FIG. 1 in accordance with one embodiment of the present invention; and

FIG. 9 illustrates details of the filter tables of FIG. 1 in accordance with one embodiment of the present invention.

### DETAILED DESCRIPTION OF THE INVENTION

FIG. 1 illustrates a performance evaluation system in accordance with one embodiment of the present invention. As described in more detail below, the performance evaluation system **10** uses productivity and quality data to evaluate the performance of an individual, group, process or other suitable type of item or operation.

Referring to FIG. 1, the performance evaluation system **10** is deployed on a three-tiered architecture. The three-tiered architecture includes client space **12**, server application space **14** and database space **16**. The client space **12** is implemented on a client platform **18** such as a work station, personal computer or other device capable of communicating between a user and a server. The server application and database spaces **14** and **16** are implemented on a server platform **20** such as a personal computer or other device capable of being remotely accessed over a network.

The client and server platforms **18** and **20** are connected by a network **22**. The network **22** may comprise the Internet or other wide area network (WAN), an enterprise intranet or other a local area network (LAN), or other suitable type of link capable of communicating data between the client and server platforms **18** and **20**.

The client space **12** includes a web-browser **30** having a graphical user interface (GUI) **32**. The graphical user interface **32** displays web pages **34** downloaded over the network **22** from the server application space **14**. The web pages **34** may use HTML or Active X controls **36**. The Active X controls **34** provide a rich interface **32** with superior scripting control.

The server application space **14** includes a server engine **40**, business objects **42**, reports **44**, charts **46**, and a data importer **48**. The server engine **40** includes active server pages (ASP) **50** that include server-side components and scripting. The server-side components are specialized Active X components executed prior to delivery of web pages to the client space **12**. The server-side scripting accesses the interfaces of the server-side components. Use of the active server pages **50** allows the web pages to be updated in response to changing system and database settings.

The business objects **42** call stored procedures in the database space **16** and perform preprocessing and expressions processing functions. In a particular embodiment, the business objects **42** include an organization object, a plan object, an evaluation object, an import service object, and a results object. In this embodiment, the organization object provides an interface for basic organizational functionality. The organization object also provides an interface to a class of services table giving the client space **12** access to allowed functions. The plan object provides an interface for the manipulation and use of evaluation guidelines. The evaluation object provides interfaces for performing evaluations. The import service object schedules and retrieves external data and places it into a delimited file. The import service object also provides a basic interface to the configuration settings. The results object receives information from the client space **12** for selecting reports based on the requested filters. Each of the objects may comprise one or more objects.

The reports **44** may include both detail and summary reports. The detail reports provide information for members and elements of each member. In a particular embodiment, the detail reports include a productivity and quality report, a quality evaluation report, a productivity analysis report, a quality question report, a productivity element report, and a detail evaluation report. The productivity and quality report presents actual scores, maximum scores, and percentages of maximum for both quality and productivity by an evaluation date for each member with group averages for all hierarchical levels. The quality evaluation report presents notes, actual scores, maximum score, and percentages of maximum for each question of an evaluation with subtotals by performance areas, evaluation, member, and any additional hierarchical levels. The productivity analysis report presents actual scores, maximum score, and percentage of maximum for each equation of productivity analysis with subtotals by member and by any additional hierarchical levels. The quality and question report presents actual scores for each question along with the total actual score, maximum score, and percentage of maximum for each performance area with subtotals by evaluation, member, and any additional hierarchical levels. The productivity element report presents actual data along with the equation-produced actual score, maximum score, and percentage of maximum for each

element of productivity data with subtotals by member and any additional hierarchical levels. The detail evaluation report presents evaluation date, time, and status of all evaluations for a member subtotal by status, date, member, and evaluator.

The summary reports provide average scores for a particular member or level. In a particular embodiment, the summary reports include a productivity and quality report, a quality evaluation report, a productivity analysis report, a quality question report and a productivity and quality comparison report. The productivity and quality report presents average scores for both quality and productivity for each member with group averages for all hierarchical levels. The quality evaluation report presents average scores by performance areas, evaluation, member, and any additional hierarchical levels. The productivity analysis report presents average scores for each equation of productivity data with subtotals by member and any additional hierarchical levels. The quality question report presents the total score for each question and the percentage of maximum scores for each performance area. The productivity and quality comparison report presents average scores, maximum scores and percentage of maximum for both quality and productivity by member with comparison averages for a chosen hierarchical level. Additional detail and summary reports can be created by selecting various categories of information.

The charts **46** display graphic and textual information useful in determining the overall performance of a member and identifying ways to improve that performance. In a particular embodiment, the charts **46** include sets of productivity and quality charts, productivity charts and quality charts. The productivity and quality charts plot productivity and quality scores for date, member, users and hierarchical levels. The productivity charts present productivity data plotted against time for members, users, and other hierarchical levels. The quality charts present quality data plotted against time for members, users, questions and hierarchical levels.

The data importer **48** imports productivity data from external sources such as a telephony switch. The data importer **48** includes preprocessors **52** and a work area **54**. The preprocessors **52** are tools used to create an instruction file for interpreting the information in a data file. The instruction files are operable to parse data files. In one embodiment, the preprocessors **52** include Nortel Datastream, Rockwell Spectrum IMS, and Monarch. The Nortel Datastream preprocessor is used for converting Nortel Datastream report information into a delimited format. The Rockwell Spectrum IMS preprocessor is used for converting Rockwell report information. The Monarch preprocessor can be used to create custom preprocessors. Accordingly, the performance evaluation system **10** can be configured to import any type of suitable data file **56** from an external device **58**.

The preprocessors **52** create a delimited file **60** from a data file **56**. In the delimited file **60**, columns of data are each separated by a delimiter character such as a comma, hyphen, colon, and the like. The delimiter acts as reference point telling the data importer **48** where one column of data stops and a new column starts. If the data file **56** is already in a delimited format, a preprocessor **52** is not used.

The delimited file **60** is a temporary file stored in the work area **54**. As described in more detail below, the delimited file **60** is moved to the database space **16** and the productivity data mapped into the database based on the configuration defined in the database. Accordingly, the evaluation process is streamlined by having data in a central location for analysis.

The database space **16** includes a database manager **70** and a database **72**. The database manager **70** calls stored procedures **80** to access the database **72**. The stored procedures **80** are a precompiled collection of SQL statements and optional control-of-flow statements stored under a name and processed as a unit. The stored procedures **80** are stored within a database **72**, can be executed with one call from the database manager **70**, and allow user-declared variables, conditional executions, and other programming features.

In addition to the stored procedures **80**, the database **72** includes organization tables **82**, privileges tables **84**, plans tables **86**, data import tables **88**, productivity tables **90**, evaluation tables **92** and filter tables **94**. As described in more detail below, the organization tables **82** allow an enterprise to set up the performance evaluation system **10** to correspond to its organizational structure. The privileges tables **84** store user access privileges based on views of the organizational structure and on class of services. The plan tables **86** store questions, performance areas, and guidelines for generating performance evaluations in the performance evaluation system **10**. The data import tables **88** store configurations for importing productivity data into the performance evaluation system **10**. The productivity tables **90** store productivity data for members of the performance evaluation system **10**. The evaluation tables **92** store responses and scores for completed evaluations. The filter tables **94** store filters for sorting data and displaying results in the reports **44** and charts **46**.

In a particular embodiment, the client and server platforms **18** and **20** are each a personal computer connected via the Internet. In this embodiment, the client and server **18** and **20** may each operate using MICROSOFT WINDOWS NT version 4.0 that provides TCP/IP connectivity over the Internet. The web-browser **30** may be Internet Explorer 3.2x or higher. The server engine **40** may be Internet Information Server 3.0 or higher. The database may be a relational database and the database manager **70** an SQL Server 6.5.

The web-base architecture of the performance evaluation system **10** allows performance evaluation methodology to be standardized throughout an enterprise. In addition, users can take advantage of the Internet or other network to remotely access the performance evaluation system and complete member evaluations. Members can also remotely track their progress.

FIG. 2 illustrates an exemplary call center **100** using the performance evaluation system **10**. Although the performance evaluation system **10** will be described in connection with the exemplary call center **100**, it will be understood that the performance evaluation system **10** may be used for other types of enterprises, including other types of companies, businesses, groups, and organizations.

Referring to FIG. 2, the call center **100** includes a server **102** connected to a plurality of clients **104** through a local area network (LAN) **106**. The call center **100** includes a system administrator (user **1**), a service manager (user **10**), a technical manager (user **20**), a sales manager (user **30**), a product A manager (user **31**), and a product B manager (user **35**). Service agents (members **11** and **12**) report to the service manager. Technical agents (members **21** and **22**) report to the technical manager. Product A agents (members **32** and **33**) report to the product A manager. Product B agents (members **36** and **37**) report to the product B manager. In addition, the product A and B managers report to the sales manager.

FIG. 3 illustrates details of the organization tables **82**. The organization tables **82** allow an enterprise to set up the

performance evaluation system **10** to fit the organizational structure of the enterprise. Thus, the organization tables **82** may store any number of user-defined levels in any user-defined hierarchy. In this way, quality and productivity tools are customized for the enterprise.

Referring to FIG. 3, the organization tables **82** include a level table **120**, an interlevel assignment table **122**, member tables **124**, a user table **126**, a user-member table **128**, a keyword table **130**, and a keyword assignment table **132**. The level table **120** lists all the levels of the enterprise by a level ID. The levels are a collection of members who can be grouped together. The level IDs may be any suitable identifier operable to uniquely identify the levels. For the call center **100** of FIG. 2, the levels are the company, the service group, the technical group, the sales group, the product A team, and the product B team.

The interlevel assignment table **122** assigns a lower level in the enterprise hierarchy to a higher level in the hierarchy. In the interlevel assignment table **122**, a first field identifies a higher level to which a lower level is assigned and a second field identifies the lower level. The labels "first" and "second" are used to distinguish between fields and not to specify a particular order for the fields. The lower levels may be assigned to a next higher level in the hierarchy or to each higher level in the hierarchy. The levels are identified in the interlevel assignment table **122** by the level IDs. For the call center **100** of FIG. 2, the service, technical, and sales group levels are assigned to the company level and the product A and B team levels are assigned to the sales group level.

The member tables **124** list in a first field all the members of the enterprise by a member ID. The members are those individuals of the enterprise on which functions of the system **10** are performed. Each member ID may be unique codes assigned by the performance evaluation system **10** when the member is first defined in the system **10**.

In the member tables **124**, a second field assigns the member to a level. Additional fields provide member attributes, such as first and last name, password, comments, and the like. In another embodiment, some or all of the member attributes may be stored in a separate table. For the call center **100** of FIG. 2, service agents (members **11** and **12**) are assigned to the service group, technical agents (members **21** and **22**) are assigned to the technical group, product A agents (members **31** and **32**) are assigned to the product A team, and so on through product B agent (member **37**) assigned to product B team.

The user table **126** lists all the users of the enterprise by a user ID. The users are people in the performance evaluation system **10** that perform the evaluations and that carry out the various tasks associated with the evaluation process such as defining all of the information needed to perform the evaluations. The user IDs may be any suitable identifier operable to uniquely identify the users. For the call center **100** of FIG. 2, the users are the system administrator (user **1**), the service manager (user **10**), the technical manager (user **20**), the sales manager (user **30**), the product A manager (user **31**), and the product B manager (user **35**).

The users-member table **128** cross-references user IDs with member IDs for users who are also members in the system **10**. A user is also a member when the user reports to and is evaluated by a user higher in the enterprise hierarchy. For the call center **100** of FIG. 2, users **31** and **35** report to user **30**. Accordingly, users **31** and **35** are cross-referenced as members in the users-member table **128**.

The keyword table **130** lists all the keywords defined in the performance evaluation system **10** by a keyword ID. The

keywords provide an easy way to classify members and other items of the performance evaluation system **10**. The keywords can also be used to filter performance data for analysis or printing reports. The keyword IDs may be any suitable identifier operable to uniquely identify the keywords in the system **10**. For the call center **100** of FIG. **2**, the keywords may relate to the experience of an agent or to an agency from which the agent was hired. In this way, the performance of the agents may be compared based on their experience, the agency from which they were hired, and the like.

The keyword assignment table **132** assigns keywords to a member. In the keyword assignment table **132**, a first field identifies a member by a member ID and a second field identifies a keyword assigned to the member by a keyword ID. One or more keywords may be assigned to each of the members. For the call center **100** of FIG. **2**, if the service agent (member **11**) is hired from the AA Agency and has two years' experience, keywords "Temp-AA Agency" and "2 years experience" are assigned to the service agent (member **11**).

FIG. **4** illustrates details of the privilege tables **84**. The privilege tables **84** assign each user a view and a class of services. The view specifies the levels and members of an organizational structure to which the user is allowed access. The class of services specifies services of the performance evaluation system **10** that the user is allowed to perform. The user has access privileges to perform services within the user's class of services for levels and members within the user's view. In this way, access privileges may be easily updated and maintained for the user in response to changes in allowed services or organizational structure. As a result, system administration cost is reduced.

Referring to FIG. **4**, the privilege tables **84** include a user view table **140**, a class of service assignment table **142**, and a class of service template table **144**. The user view table **140** specifies levels and members of the organizational structure to which the user is allowed access.

In the user view table **140**, a first field identifies a user by user ID, a second field identifies a level or member associated with the user by the level or member ID, a third field identifies whether the item in the second field is a level or a member, and a fourth field enables the stored association between a user and a level or member in the user's view. Thus, in this embodiment, each user is associated with each level in the user's branch of the organizational structure and with members that report to the user. Each association between a user and a level or member may be enabled or disabled in the user's view and deselected using column **196** to be excluded from the user's view. In another embodiment, the user view table **140** may include only associations that are included in the user's view. In this embodiment, the fourth field is omitted.

For the call center **100** of FIG. **2**, the system administrator (user **1**) is associated with each level and member in the performance evaluation system **10**. All of the associations for the system administrator are enabled and thus included in the system administrator's view to allow the system administrator to access each level and member of the system. The service manager (user **10**) is associated with each level in the service manager's branch of the organizational structure and with members that report to the service manager. Thus, the service manager is associated with the company and service group levels and with the service agents (members **10** and **11**) that report to the service manager. The associations between the service manager, the

service level and the service agents are enabled to allow the service manager to access the level and members to configure and perform performance evaluations and other functions for the members and level. The association with the company level is not enabled and thus excluded from the service manager's view. Similarly, the product B manager (user **35**) is associated with the company, sales group, and product A and B team levels and with the product B agents (members **36** and **37**) that report to the product B manager. The associations with the product B team level and product B agents are enabled and included in the product B manager's view. Access to the company and the sales group levels are not enabled and thus excluded from the product B manager's view.

The user view table **140** may be manually populated by the system administrator or other user having suitable access privileges or may be generated based on the organizational structure defined by the organization tables **82**. In the latter embodiment, a user assignment table is used to assign each user to a level. Based on that assignment, the organization tables **82** are interrogated to determine the levels within the user's branch of the organizational structure and the members that report to the user. This information is then used to populate the user view table **140**. After the table is populated, associations are to be included in the user's view.

The class of service assignment table **142** assigns a class of service template to a user. In the class of service assignment table **142**, a first field identifies the user by the user ID and a second field identifies the class of service template by a service template ID. The service template ID may be any suitable identifier operable to uniquely identify the service templates. Use of the service templates allows a particular class of services to be defined and reused for any number of users. For example, for the call center **100** of FIG. **2**, group and team templates may be defined and associated with the group and team managers, respectively. Accordingly, the performance evaluation system **10** is more efficiently configured and administration cost is reduced.

The class of service template table **144** specifies the class of services for each service template. The class of service template table **144** includes a first field identifying a service template by the service template ID. Additional fields are included to specify the services to be included in the service template. The class of service template table **144** also includes a field for identifying a specific user by the user ID. This is used to generate a custom class of services for the user rather than a service template.

The services are predefined for the performance evaluation system **10**. In a particular embodiment, the services may include administer productivity values, administer productivity data elements, access charting and reporting and administer filters, administer keywords, administer member information, administer class of service, administer evaluation expressions, configure data import settings, import data, administer organizational structure, perform reviews, add or modify reviews, delete reviews, administer performance areas and questions, browse my reviews, browse my performed reviews, browse all reviews, and administer user information.

FIG. **5** illustrates details of the plan tables **86**. The plan tables **86** store questions, performance areas **10** constructed of a set of questions, and guidelines constructed of a set of performance areas. The questions, performance areas, and guidelines are used to generate performance evaluations for members of the performance evaluation system **10**. The use and sharing of questions by multiple performance areas and

the use and sharing of performance areas by multiple guidelines allows evaluations to be efficiently defined and automatically generated. In addition, members in a group are evaluated against the same set of criteria to provide fairness and objectivity. As a result, managers can perform consistent, objective evaluations efficiently.

Referring to FIG. 5, the plan tables include a question table 150, an answer types table 152, a performance area table 154, a question assignment table 156, an expression table 158, an expression assignment table 160, a guideline table 162, and a performance area assignment table 164. The question table 150 defines questions that will be used in the performance evaluations. The question table 150 includes a first field identifying the question by a question ID, a second field providing a title for the question, a third field specifying text for the question, and a fourth field assigning a weight to the question. The question ID may be any suitable identifier operable to uniquely identify the questions.

For the call center 100 of FIG. 2, a first question may be directed toward schedule adherence and ask “How often does the agent work on the originally assigned shift?” and a second question may be directed toward promptness and ask “How often is the agent late for work?”. Relative weights are assigned to the question depending on their importance to the enterprise. Thus, if promptness is more important to the enterprise than schedule adherence, the second question will be assigned a greater weight.

The answer types table 152 associates each question with a predefined answer type and attributes for that answer type. In the answer types table 152, a first field identifies the question by the question ID, a second field identifies the answer type by an answer type ID, and a third field identifies the attributes for the answer type. The answer type IDs may be any suitable identifier operable to uniquely identify the answer types.

In a particular embodiment, defined answer types include yes/no, drop-down lists, horizontal scroll bar, edit box, and radio button answers. The yes/no answer type asks for either a yes or a no response. The drop-down list asks for one answer from a list of possible answers. The horizontal scroll bar answer type asks for an answer on a continuum for an overall rating. The edit box answer type asks for a numeric answer. The radio buttons ask for one answer from a list of possible answers. Attributes for the answer types include where appropriate, target values, labels, maximum and minimum values, and the like.

The performance area table 154 lists all the performance areas in the performance evaluation system 10 by a performance area ID. Each performance area is a grouping of questions that relates to a particular area of job performance. The performance area IDs may be any suitable identifier operable to uniquely identify the performance areas. For the call center 100 of FIG. 2, the performance areas may include on-call greeting and call closing.

The question assignment table 156 assigns questions to the performance areas. In the question assignment table 156, a first field identifies a performance area by a performance area ID and a second field identifies a question assigned to the performance area by a question ID. One or more questions may be assigned to each of the performance areas. In addition, questions may be reused between performance areas. For example, performance areas 2, 3 and 4 may each include question 3.

The expression table 158 lists in a first field all the expressions in the performance evaluation system 10 by an expression ID. The expression IDs may be any suitable

identifier operable to uniquely identify the expressions. A second field specifies a mathematical equation for the expression. The equation may contain data elements, numeric values, mathematical operations or mathematical functions. In a particular embodiment, the mathematical operations include addition, subtraction, multiplication and division. The mathematical functions include sum, average, minimum, maximum, and peak.

The expression assignment table 160 assigns expressions to the performance areas. When associated with a performance area, the expressions are used to compute a productivity score for that performance area. In the expression assignment table 160, a first field identifies a performance area by a performance area ID and a second field identifies an expression assigned to the performance area by an expression ID. One or more expressions may be assigned to each of the performance areas. In addition, an expression may be reused between performance areas. For example, performance areas 1 and 6 may each include expression 1.

The guideline table 162 lists all the guidelines in the performance evaluation system 10 by a guideline ID. Each guideline combines one or more performance areas that are of interest for a particular evaluation. The guideline IDs may be any suitable identifier operable to uniquely identify the guidelines. For the call center 100 of FIG. 2, the performance areas may include technical group, product A team, product B team, and the like.

The performance area assignment table 164 assigns performance areas to the guidelines. In the performance area assignment table 164, a first field identifies a guideline by a guidelines ID and a second field identifies a performance area assigned to the guidelines by a performance area ID. One or more performance areas may be assigned to each of the guidelines. In addition, performance areas may be reused between guidelines. For the call center 100 of FIG. 2, for example, the service, technical, product A team, and product B team guidelines may each include performance area 1.

FIG. 6 illustrates details of the productivity tables 90. The productivity tables 90 store productivity data for members of the performance evaluation system 10. The productivity data is used by the expressions in the performance areas to calculate productivity scores.

Referring to FIG. 6, the productivity tables 90 include a data element table 166 and a productivity table 168. The data element table 166 lists all the data elements in the performance evaluation system 10 by a data element ID. The data elements are items of information used to measure the productivity of members in the performance evaluation system 10. The data element IDs may be any suitable identifier operable to uniquely identify the data elements.

The productivity table 168 includes a first field identifying members with a member ID, a second field providing dates for the records, a third field identifying the data element for the record by a data element ID, and a fourth field storing the value of the data element.

FIG. 7 illustrates details of the data import tables 88. The data import tables 88 import productivity data into the performance evaluation system 10 from external devices and automatically insert it into the production table. As a result, the evaluation process is streamlined by having data in a centralized location for data analysis.

Referring to FIG. 7, the data import tables 88 include configuration tables 170, an import template assignment table 172, and an import template table 174. Each configuration table 170 provides information for identifying and mapping data from the delimited file 60 to the productivity table 90.



The configuration table **170** includes a first field identifying a column in the delimited file **60** containing a data item corresponding to a data element, a second field identifying a data name, a third field identifying a data type, a fourth field identifying a data format, and a fifth field mapping the data item to the data element in the productivity table **90**. In a particular embodiment, the data types include identity, date, duration and numeric types. An identity column provides identifying information such as a name or code. The date column provides the date of the information. The duration column shows an amount of time for the information. A numeric column contains a value.

The import template assignment table **172** assigns an import template to a configuration. In the import template assignment table **172**, a first field identifies the configuration by a configuration ID and a second field identifies the import template by an import template ID. The configuration and import template IDs may be any suitable identifiers operable to uniquely identify the configurations and import templates, respectively. Use of the import templates allows a process for imported data to be defined and reused for any number of configurations. Accordingly, the performance evaluation system **10** is more efficiently configured and administration cost is reduced.

The import template table **174** specifies preprocessor and other information for importing the data file **56**. The import template table **174** includes a first field identifying the import templates by the import template IDs. A second field identifies a preprocessor, if any, to be applied to the data file **56** to generate the delimited file **60**. A third field identifies the delimiter used in the delimited file **60**.

In operation, productivity data is imported by selecting a configuration, selecting users to determine how the data will be applied (members assigned to selected users receive the productivity data), specifying how the date will be determined, selecting the data file **56** to import by selecting a drive and the file name, specifying how to match productivity data to members (by name or code), and selecting whether or not to replace existing productivity information. In response to the import request, the data importer **48** retrieves the requested data file **56** and if the import template associated with the configuration requests a preprocessor **52**, applies the preprocessor **52**. Using the delimiter information in the import template for the configuration and the mapping information in the configuration table, the data importer **48** inserts the productivity data into the productivity tables **90** for members in the user's view.

FIG. **8** illustrates details of an evaluation stored in the evaluation tables **92**. As previously described, the evaluation is automatically generated based on guidelines, performance areas, and questions selected for the evaluation.

Referring to FIG. **8**, the evaluation includes a member ID **180** for whom the evaluation was completed, a date **182** on which the evaluation was completed, and a plurality of performance areas **184**. The performance areas **184** each include one or more questions **186** and their associated answer types **188**. As the evaluation is completed, responses **190** are stored for each question and used to calculate a quality score **192** for the performance area **184**. The quality score **192** is a measure of "goodness" for the member's performance.

The quality score **192** for a performance area **184** is calculated based on the relative weight of the questions **186** in the performance area **184**. The score of responses **190** to all questions **186** in the performance area **184** are summed and divided by the sum of the relative weights. This pro-

duces a quality score **192** for the performance area **184**. Mathematically, this is expressed in the following way:

$$\frac{\sum_{i=1}^n \left( \left( \frac{achieved_i - worst_i}{target_i - worst_i} \right) * relWeight_i \right)}{\sum_{i=1}^n relWeight_i}$$

where

n is the number of applicable questions in the performance area

i ranges over the answered questions in the performance area

achieved<sub>i</sub> is the number of points the member actually earned for question i

worst<sub>i</sub> is the lowest possible score that can be assigned to question i

relWeight<sub>i</sub> is the relative weight for question i

target<sub>i</sub> is the target value for question i

After the quality scores **192** have been calculated for the performance areas **184** in an evaluation **92**, the quality scores **192** are summed and divided by the sum of the relative weight for all questions to derive a total evaluation quality score **194**. Mathematically, this is expressed as:

$$\frac{\sum_{i=1}^n qScore_i}{\sum_{i=1}^n relWeight_i}$$

where

n is the number of applicable questions in the evaluation

i ranges over the applicable questions in the evaluation

qScore<sub>i</sub> is the q-score for question i

relWeight<sub>i</sub> is the relative weight for question i

The performance areas **184** may also each include one or more expressions **200** to calculate a productivity score **202**. As previously described, the expression **200** is a user-defined formula to calculate a measure of productivity against a target score.

The calculation of productivity score **202** for a performance area **184** is a direct computation of the expression **200** using the productivity data. After the productivity score has been calculated for all performance areas **184** that have an associated expression **200**, the performance area productivity scores **202** are tallied to derive a total productivity score **204** for the evaluation. Mathematically, this is expressed as a median score of all performance area productivity scores:

$$\frac{\sum_{i=1}^n \frac{achieved_i}{target_i}}{n}$$

where

n is the number of performance areas in the evaluation having an associated evaluation expression that can be successfully calculated

i ranges over the performance areas in the evaluation  
achieved<sub>i</sub> is the number of points the member actually earned for performance area i

target<sub>i</sub> is the target value for performance area i

In another embodiment, the productivity scores for the different performance areas **184** may be weighted based on

importance. In this embodiment, the overall productivity score for the evaluation is calculated by the following equation:

$$\frac{\sum_{i=1}^n w_i \frac{\text{achieved}_i}{\text{target}_i}}{n}$$

where

n is the number of performance areas in the evaluation having an associated evaluation expression that can be successfully calculated

i ranges over the performance areas in the evaluation  $w_i$  is the importance factor associated with performance i's p-score

$\text{achieved}_i$  is the number of points the member actually earned for performance area i

$\text{target}_i$  is the target value for performance area i

In operation, the user selects the member **180** and an existing guideline or one or more performance areas **184** for the evaluation. The evaluation is then automatically generated. Quality scores are generated based on the user's responses. Productivity scores are generated based on productivity data.

FIG. 9 illustrates details of the filter tables **94**. The filter allows the user to define certain criteria for reporting and charting. This criteria is used to sort the data and display results in the charts and reports.

Referring to FIG. 9, the filter tables **94** include a first field identifying the filters with a filter ID. The filter ID may be any suitable identifier operable to uniquely identify the filters. A second field indicates whether the filter includes plan criteria. Each category of plan criteria is specified by a separate look-up table. In a particular embodiment, the categories include evaluations, guidelines, performance areas, questions, expressions, and evaluators. In this embodiment, an evaluation filter table associates the filter with evaluations, a guideline filter table associates the filter with an identified guideline, a performance area filter table associates the filter with a specified performance area, a question filter table specifies questions for the filter, an expressions filter table specifies expressions for the filter and an evaluators filter table specifies evaluators for the filter. Each of these filter's tables include a first field identifying the filter with a filter ID and a second field identifying the relevant evaluation, guideline, performance area, question, expression or evaluator for the filter.

Returning to the filter table **94**, a set of date fields specify date(s) for the filter. The date may be a current day, current month, current quarter, current week, current year, previous day, previous month, previous quarter, previous week, previous year, or be otherwise defined by the user. A set of data fields specify data for the filter. The data may be members, all members, or member levels. A set of averages fields specify averages for the filter. The averages may be daily, weekly, bi-weekly, or monthly. A set of sample size fields specify sample size for the filter. The sample size allows data to be filtered based on any sample size entered by the user. A keyword field indicates whether the filter includes any keywords. Keywords are associated with the filter in a separate look-up table as previously described for plan criteria.

Thus, evaluators, guidelines, performance areas, questions, expressions, dates, data, averages, keywords, sample size, and other criteria may be specified for the filter. As a result, a user may narrowly define information and obtain meaningful results.

Although the present invention has been described with several embodiments, various changes and modifications may be suggested to one skill in the art. It is intended that the present invention encompass such changes and modifications as fall within the scope of the appended claims.

What is claimed is:

**1.** A method for generating an evaluation in a performance evaluation system, comprising:

storing a plurality of questions associated with a call center;

storing a plurality of performance area identifiers, each performance area identifier corresponding to a performance area associated with the call center;

associating each of the performance areas with at least one of the questions;

associating a plurality of the performance areas with one question;

storing a plurality of guideline identifiers, each guideline identifier corresponding to a guideline associated with the call center;

associating each of the guidelines with at least one of the performance areas;

associating a plurality of the guidelines with one of the performance areas;

receiving a selection of a member of the call center for an evaluation of the member;

receiving a selection of at least one performance area for the evaluation;

dynamically determining questions associated with the selected performance area, the selected performance area comprising the dynamically determined questions; and

automatically generating the evaluation of the member and including the dynamically determined questions in the evaluation.

**2.** The method of claim **1**, further comprising:

storing a weight for each of at least a subset of the questions; and

including weights for the questions associated with the selected performance area in the evaluation.

**3.** The method of claim **1**, further comprising:

storing a target score for each of at least a subset of the questions; and

including target scores for the questions associated with the selected performance area in the evaluation.

**4.** The method of claim **1**, further comprising:

associating a predefined answer type with each of at least a subset of the questions; and

including predefined answer types for the questions associated with the selected performance area in the evaluation.

**5.** The method of claim **1**, further comprising:

storing an expression operable to calculate a productivity score for a performance area based on productivity data associated with the evaluation;

associating the expression with the performance area;

determining the expression for the selected performance area; and

including the expression associated with the selected performance area in the evaluation.

**6.** The method of claim **5**, further comprising using the expression to score productivity data associated with the evaluation.

## 15

7. The method of claim 5, further comprising:  
 storing a weight for each of the questions;  
 for each question in the evaluation, including the weight  
 for the question;  
 using the weights in the evaluation to calculate a quality  
 score for the selected performance area;  
 using the expression in the evaluation to calculate a  
 productivity score for the evaluation; and  
 combining the quality and productivity scores to deter-  
 mine a performance score for the evaluation.
8. The method of claim 1, further comprising:  
 receiving a selection of a guideline for the evaluation;  
 dynamically determining each performance area associ-  
 ated with the selected guideline, the selected guideline  
 comprising the dynamically determined performance  
 areas; and  
 dynamically determining questions associated with each  
 of the dynamically determined performance areas.
9. The method of claim 8, further comprising:  
 for each performance area, storing an expression operable  
 to calculate a productivity score for the performance  
 area based on productivity data associated with the  
 performance area;  
 associating the expression with the performance area;  
 determining the expression for each of the performance  
 areas associated with the selected guideline; and  
 including the expressions in the evaluation.
10. The method of claim 8, further comprising associating  
 a plurality of guidelines with one performance area.
11. A performance evaluation system, comprising:  
 a database comprising  
 a first database table that stores a plurality of questions  
 associated with a call center,  
 a second database table that stores a plurality of per-  
 formance area identifiers, each performance area  
 identifier corresponding to a performance area asso-  
 ciated with the call center,  
 a third database table that associates each of the per-  
 formance areas with at least one of the questions and  
 to associate a plurality of the performance areas with  
 one question,  
 a fourth database table that stores a plurality of guide-  
 line identifiers, each guideline identifier correspond-  
 ing to a guideline associated with the call center, and  
 a fifth database table that associates each of the guide-  
 lines with at least one of the performance areas; and  
 a database manager that receives a selection of at least one  
 of the performance areas for an evaluation, to interro-  
 gate the database tables to dynamically determine ques-  
 tions associated with the selected performance area and  
 to generate the evaluation and include the dynamically  
 determined questions in the evaluation.
12. The performance evaluation system of claim 11,  
 wherein the first database table defines a weight for each of  
 at least a subset of the questions.
13. The performance evaluation system of claim 11, the  
 database further comprising a sixth database table that  
 associates each question with a predefined answer type.
14. The performance evaluation system of claim 11, the  
 database further comprising a sixth database table that  
 defines a target score for each of at least a subset of the  
 questions.
15. The performance evaluation system of claim 11, the  
 database further comprising:  
 a sixth database table that defines a plurality of  
 expressions, the expressions each operable to calculate

## 16

- a productivity score for a performance area based on  
 productivity data associated with the performance area,  
 and  
 a seventh database table that associates the expressions  
 with the performance areas; and  
 wherein the database manager interrogates the database  
 tables to determine an expression associated with the  
 selected performance area and to include the associated  
 expression in the evaluation.
16. The performance evaluation system of claim 11,  
 wherein the database manager receives a selection of at least  
 one of the guidelines, to dynamically determine perfor-  
 mance areas for the selected guideline, and to dynamically  
 determine questions associated with each of the dynamically  
 determined performance areas for the selected guideline.
17. The performance evaluation system of claim 16,  
 wherein the fifth database associates a plurality of guidelines  
 with one performance area.
18. A method for generating an evaluation in a perfor-  
 mance evaluation system, comprising:  
 storing a plurality of questions associated with a call  
 center;  
 storing a plurality of performance area identifiers, each  
 performance area identifier corresponding to a perfor-  
 mance area associated with the call center;  
 associating each of the performance areas with at least  
 one of the questions;  
 storing a plurality of guideline identifiers, each guideline  
 identifier corresponding to a guideline associated with  
 the call center;  
 associating each of the guidelines with at least one of the  
 performance areas;  
 associating a plurality of the guidelines with one of the  
 performance areas;  
 receiving a selection of a member of the call center for  
 evaluation of the member;  
 receiving a selection of at least one performance area for  
 an evaluation of the member;  
 dynamically determining questions associated with the  
 selected performance area, the selected performance  
 area comprising the dynamically determined questions;  
 and  
 automatically generating the evaluation and including the  
 dynamically determined questions in the evaluation.
19. The method of claim 18, further comprising:  
 storing a weight for each of at least a subset of the  
 questions; and  
 including weights for the questions associated with the  
 selected performance area in the evaluation.
20. The method of claim 18, further comprising:  
 storing a target score for each of at least a subset of the  
 questions; and  
 including target scores for the questions associated with  
 the selected performance area in the evaluation.
21. The method of claim 18, further comprising:  
 associating a predefined answer type with each of at least  
 a subset of the questions; and  
 including predefined answer types for the questions asso-  
 ciated with the selected performance area in the evalu-  
 ation.
22. The method of claim 18, further comprising:  
 storing an expression operable to calculate a productivity  
 score for a performance area based on productivity data  
 associated with the evaluation;

associating the expression with the performance area;  
determining the expression for the selected performance  
area; and

including the expression associated with the selected  
performance area in the evaluation. 5

**23.** The method of claim **22**, further comprising using the  
expression to score productivity data associated with the  
evaluation.

**24.** The method of claim **22**, further comprising:

storing a weight for each of the questions; 10

for each question in the evaluation, including the weight  
for the question;

using the weights in the evaluation to calculate a quality  
score for the selected performance area; 15

using the expression in the evaluation to calculate a  
productivity score for the evaluation; and

combining the quality and productivity scores to deter-  
mine a performance score for the evaluation. 20

**25.** A method for generating an evaluation in a perfor-  
mance evaluation system, comprising:

storing a plurality of questions associated with a call  
center;

storing a plurality of performance area identifiers, each 25  
performance area identifier corresponding to a perfor-  
mance area associated with the call center;

associating each of the performance areas with at least  
one of the questions;

associating a plurality of the performance areas with one 30  
question;

storing a plurality of guideline identifiers, each guideline  
identifier corresponding to a guideline associated with  
the call center;

associating each of the guidelines with at least one of the 35  
performance areas;

associating a plurality of the guidelines with one of the  
performance areas;

receiving a selection of a member of the call center for an 40  
evaluation of the member;

receiving a selection of at least one of the guidelines for  
the evaluation;

dynamically determining each performance area associ- 45  
ated with the selected guideline, the selected guideline  
comprising the dynamically determined performance  
areas;

dynamically determining questions associated with the  
dynamically determined performance areas, each of the 50  
dynamically determined performance areas comprising  
the associated dynamically determined questions; and

automatically generating the evaluation of the member  
and including in the evaluation the dynamically deter-  
mined questions. 55

**26.** A method for generating an evaluation in a perfor-  
mance evaluation system, comprising:

storing a plurality of questions associated with a call  
center;

storing a plurality of performance area identifiers, each 60  
performance area identifier corresponding to a perfor-  
mance area associated with the call center;

associating each of the performance areas with at least  
one of the questions;

associating a plurality of the performance areas with one  
question;

storing a plurality of guideline identifiers, each guideline  
identifier corresponding to a guideline associated with  
the call center;

associating each of the guidelines with at least one of the  
performance areas;

associating a plurality of the guidelines with one of the  
performance areas;

receiving a selection of at least one performance area for  
an evaluation;

dynamically determining questions associated with the  
selected performance area, the selected performance  
area comprising the dynamically determined questions;

receiving a selection of a guideline for the evaluation;

dynamically determining each performance area associ-  
ated with the selected guideline, the selected guideline  
comprising the dynamically determined performance  
areas;

dynamically determining questions associated with each  
of the dynamically determined performance areas;

automatically generating the evaluation;

including the dynamically determined questions in the  
evaluation;

storing a weight for each of at least a subset of the  
questions;

including weights for the questions associated with the  
selected performance area in the evaluation;

storing a target score for each of at least a subset of the  
questions;

including target scores for the questions associated with  
the selected performance area in the evaluation;

associating a predefined answer type with each of at least  
a subset of the questions;

including predefined answer types for the questions asso-  
ciated with the selected performance area in the evalu-  
ation;

storing an expression operable to calculate a productivity  
score for a performance area based on productivity data  
associated with the evaluation;

associating the expression with the performance area;

determining the expression for the selected performance  
area;

including the expression associated with the selected  
performance area in the evaluation;

using the expression to score productivity data associated  
with the evaluation;

for each question in the evaluation, including a weight for  
the question;

using the weights in the evaluation to calculate a quality  
score for the selected performance area;

using the expression in the evaluation to calculate a  
productivity score for the evaluation; and

combining the quality and productivity scores to deter-  
mine a performance score for the evaluation.